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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,373	01/27/2000	Yuzo Horikoshi	991444	9795

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
1714	9

DATE MAILED: 02/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.	Applicant(s)	
09/492,373	HORIKOSHI ET AL.	
Examiner	Art Unit	
Callie E. Shosho	1714	

-The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 January 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) The period for reply expires 3 months from the mailing date of the final rejection.
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
 - (a) they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) they raise the issue of new matter (see Note below);
 - (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attachment.

3. Applicant's reply has overcome the following rejection(s): _____.
4. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.

Claim(s) objected to: None.

Claim(s) rejected: 1, 2, 4-10, 14-18.

Claim(s) withdrawn from consideration: _____.

8. The proposed drawing correction filed on _____ is a) approved or b) disapproved by the Examiner.
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.
10. Other: _____

Attachment to Advisory Action

1. Applicants' amendment filed 1/16/02 has been fully considered. However, the amendment has not been entered given that it raises new issues that would require further consideration as well as the issue of new matter. Additionally, the amendment raises new issues under 35 USC 112, second paragraph.

(a) With respect to the change in the specification in the paragraph beginning at page 7, line 23, this change is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is the amendment to lines 23 and 24 that amends the upper limit of the glass transition temperature for the copolymer from 70 $^{\circ}$ C to 50 $^{\circ}$ C. While the specification as originally filed discloses in Table 1, page 13 several examples of copolymers that possess glass transition temperature of 45, 10, 40, 42, 65, 38, and 15 $^{\circ}$ C, there is no support for the recitation of the upper limit of the glass transition temperature as 50 $^{\circ}$ C. Applicant is required to cancel the new matter in the reply to this Office Action.

(b) With respect to the amendment to claims 1, 14, 16, and 17 wherein each of the claims now requires that the copolymer is obtained "from a radical polymeric monomer consisting essentially of: (a) 20 through 99 wt% of styrene and styrene derivative; (b) 10 through 80 wt% alkyl acrylate, alkyl methacrylate and derivatives of alkyl acrylate and alkyl methacrylate; and (c) 1 wt% or more of polymer monomer including a polar group", it is the examiner's position that this amendment raises both new issues that would require further consideration as well as new matter.

Specifically, in each of the claims, applicants have changed the phrase "radical polymeric monomer selected from the group consisting of" to "radical polymeric monomer consisting essentially of". First, the scope of each of the claims is confusing because it is not clear what is meant by a monomer "consisting essentially of" three monomers, i.e. styrene, alkyl (meth)acrylate, and monomer including a polar group. How does a monomer consist essentially of three monomers? Further, it is not clear if the copolymer is obtained from each of the recited styrene, alkyl (meth)acrylate, and monomer including a polar group or only one of these monomers or only two of these monomers.

Additionally, applicants have amended claims 1, 14, 16, and 17 to include "1 wt% or more of polymer monomer including a polar group". It is the examiner's position that this change fails to satisfy the written description requirement under 35 USC 112, first paragraph (see the cited statute in paragraph 3 of the office action mailed 10/16/01, Paper No. 7) since there does not appear to be a written description requirement for this phrase in the application as originally filed, In re Wright, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163.

Applicants point to page 11, line 19 and after in the specification as support for this phrase. However, page 11, line 19 discloses that it is preferable to use copolymer characterized in being synthetically prepared "from at least one kind of radical polymeric monomer having a polymer group selected from styrene and styrene derivative, (b) alkyl acrylate, alkyl methacrylate and derivatives thereof". There is no disclosure or suggestion that the copolymer includes in addition to styrene and alkyl (meth) acrylate "1 wt% or more of polymer monomer including a polar group". It is noted that Table 1 on page 13 of the specification discloses copolymers obtained from monomers, in addition to styrene and alkyl (meth) acrylate, such as (meth)acrylic acid,

vinyl pyridine, 2-hydroxypropyl-N,N,N-trimethylammonium chloride acrylate, and N,N-diallylmethylammonium chloride, in amounts of 5%, 7%, and 10%. However, these few specific embodiments do not provide support for applicant to broadly recite "polymeric monomer containing polar groups" in the claims. Further, the recitation of "1 wt% or more" clearly encompasses any amount greater than or equal to 1% such as 20%, 50%, 80%, etc. for which there is clearly no support in the specification.

(c) In paragraph 5 of the office action mailed 10/16/01, Paper No. 7, examiner stated that it is not clear what is meant by "derivatives", i.e. "styrene and styrene derivatives" and "alkyl acrylate, alkyl methacrylate, and derivates thereof". Applicants argue that the term "derivatives" is commonly used in patent claims and states that thousands of patents include this term in their claims. However, "it is immaterial whether similar claims have been allowed in another application", In re Giolito et al., 188 USPQ 645. The examiner's position remains that it is not clear what compounds are encompassed by this phrase. For instance, does derivatives of alkyl acrylate and alkyl methacrylate include hydroxyalkyl (meth)acrylates, aminoalkyl (meth)acrylates, etc?

(d) In paragraph 3 of the office action mailed 10/16/01, Paper No. 7 examiner stated that amending claims 1, 14, 16, and 17 to recite that the copolymer has the "glass transition point less than or equal to 50 $^{\circ}\text{C}$ " and amending claim 4 to recite that the copolymer has "glass transition point of -30 through 50 $^{\circ}\text{C}$ " failed to satisfy the written description requirement under 35 USC 112, first paragraph given that there does not appear to be a written description requirement for

the upper limit of the glass transition point of 50 $^{\circ}\text{C}$. Applicants argue that the subject matter of the claim need not be described literally in order for the disclosure to satisfy the description requirement and cite In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). In Wertheim, the ranges described in the original specification included a range of 25-60% and specific examples of 36% and 50%. The courts held that a limitation to “between 35% and 60%” did meet the description requirement.

However, it is the examiner’s position that the present situation is not like that described in Wertheim. In the present specification (not including the changes to the specification which have not been entered as described in paragraph (a) above), it is disclosed that the copolymer has the glass transition point of “at or below 70 $^{\circ}\text{C}$ ” and “from –30 through 70 $^{\circ}\text{C}$ ” and there are examples in Table 1, page 13 of copolymers with glass transition point of 45, 10, 40, 42, 65, 38, and 15 $^{\circ}\text{C}$. Therefore, the value used in the range in Wertheim is much closer to the value disclosed in the example than in the present instance. That is, in Wertheim, the difference between the example and the claim is approximately 3%, i.e. percent difference between 35 and 36, while in the present application there is a difference between the example and the claim of about 11%, i.e. percent difference between 45 and 50. Further, in Wertheim, the claim range does not encompass 35% itself, but rather amounts between 35% and 60%, while in the present application, applicants amendment does encompass 50 $^{\circ}\text{C}$.

Applicants also cite MPEP 2163.02 and argue that the disclosure of the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention claimed, i.e. upper limit of glass transition point of 50 $^{\circ}\text{C}$. However, while Table 1, discloses glass transition points below 50 $^{\circ}\text{C}$, this does not

provide support for the amendment “glass transition point less than or equal to 50 $^{\circ}\text{C}$ ” or “glass transition point of –30 through 50 $^{\circ}\text{C}$ ”. That is, there is no support for the upper limit of 50 $^{\circ}\text{C}$. Further, in the same portion of MPEP 2163.02, page 2100-167 of the MPEP cited by applicants, it is stated that “if a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application.” It is the examiner’s position that amending the present claims to recite 50 $^{\circ}\text{C}$ as the upper limit of the glass transition point does in fact involve a departure from as well as an addition to the disclosure of the application as filed.

C.S.
Callie Shosho
January 29, 2002

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